A Clear Path to Cleaner Water:

Implementing the Vision of the State Water Board for Improving Performance and Outcomes at the State Water Boards

California Council for Environmental and Economic Balance (CCEEB)

Water Quality Task Force

- Convened in 2012
- Comprised of businesses and municipal and regional agencies

Problem Statement

Better water quality outcomes are possible if we:

- Identify and focus on greatest threats
- Promote sustainable, multi-benefit solutions to water quality problems
- Look for collaborative, creative solutions, especially for stormwater and nonpoint source pollution
- Incorporate best science and data

We need to work smarter about water quality and water supply

Problem Statement

"[The State's] resource allocation mix may not always reflect the most important water quality or water allocation concerns…Overall coordination of the various workload commitments and priority-setting mechanisms could be enhanced to allow for more holistic priority-setting and funding decisions across programs."

State Water Resources Control Board, *Resource Alignment Evaluation Report* (2012)

USEPA encourages priority-setting

"A comprehensive and integrated planning approach to a municipal government's CWA waste- and storm-water obligations offers the greatest opportunity for identifying cost-effective and protective solutions and implementing the most important projects first."

US EPA, *Integrated Municipal Stormwater and Wastewater Planning Approach Framework* (2011)

USEPA encourages priority-setting

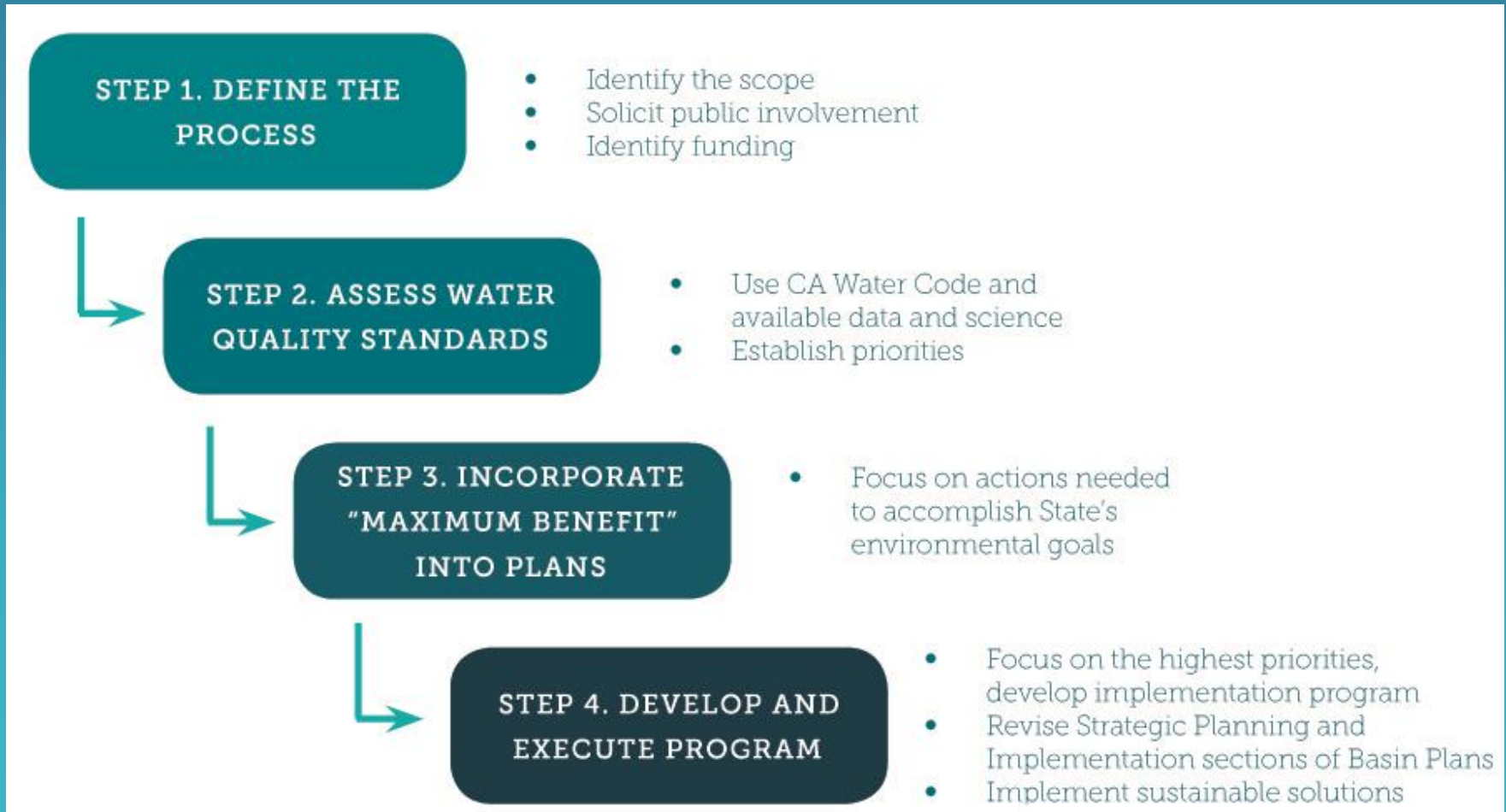
"EPA's existing regulations and policies provide EPA and states flexibility to evaluate a municipality's financial capability in tough economic times and to set appropriate compliance schedules, allow for implementing innovative solutions and sequence critical waste- and storm-water capital projects … in a way that ensures human health and environmental protection…"

US EPA, *Integrated Municipal Stormwater and Wastewater Planning Approach Framework* (2011)

California's Goals for Water and the Environment

- **Enhance water supply sustainability**
  - Increase recycled water use
  - Augment stormwater capture
  - Develop and protect local water supplies
- **Improve water quality**
  - Control stormwater runoff and nonpoint source pollution
  - Reduce point source pollution
- **Reduce energy use and GHG emissions**

CCEEB Proposed Framework



Recommendation 1:

Develop Stakeholder Participation and Funding Policy

- Establish how task forces should be used to incorporate input from all stakeholders
- Develop policy for participation and funding
- Foster a more certain regulatory environment to incorporate results into decision-making in a timely manner
- Incorporate “lessons learned” from past processes

Case Study:

Water Quality Standards for Recreation in the Santa Ana Region

Stormwater Quality Standards Task Force

- Consisted of RWQCB staff, the regulated community, and other stakeholders
- Reviewed scientific basis for bacteria water quality criteria
- Conducted beneficial use surveys
- Evaluated sources of bacteria
- Investigated efficacy of source and treatment controls
- Set implementation priorities

Recommendation 2:

Develop a "Maximum Benefit" Policy

Existing high quality waters shall be maintained unless a change will

(a) be to the maximum benefit of the people of the State and

(b) will not unreasonably affect present and anticipated beneficial uses

(State Board Resolution No. 68-16)

CCEEB recommends that the State Board develop a "Maximum Benefit Policy" *applicable to all waters*

Case Study:

TIN/TDS Task Force, Santa Ana

Used "maximum benefit" concepts to identify where water quality objectives could be adjusted to protect beneficial uses and promote broad regional goals:

- Maximize potable water supply
- Provide net environmental improvement
- Displace demand for potable water
- Meet a compelling state interest
- Increase the use of recycled water in the region/state

Recommendation 3:

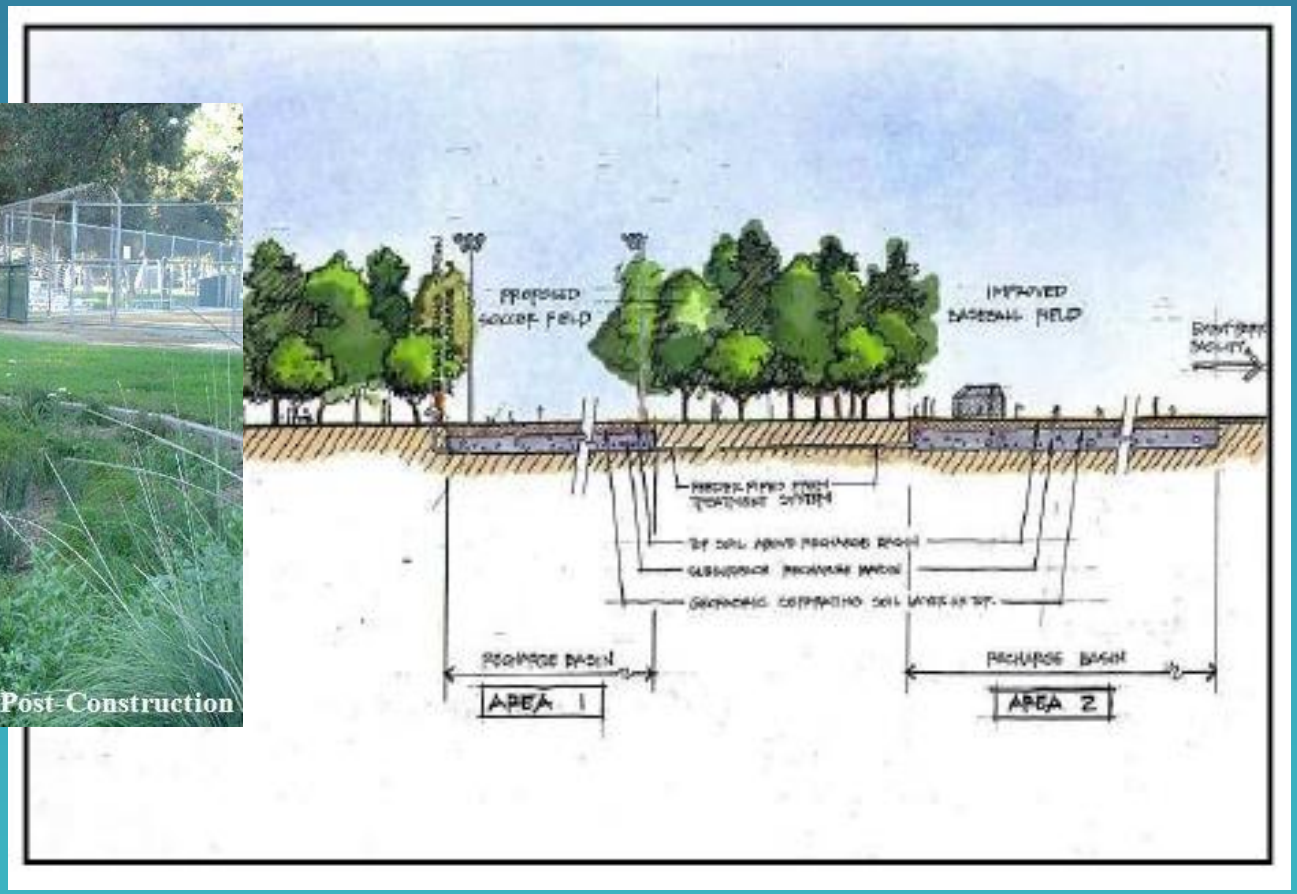
Emphasize sustainable solutions

The State Board should develop guidelines for implementing water quality requirements to promote sustainable solutions, green infrastructure and multi-benefit projects

Dominguez Gap Wetlands

Case Study:

Multi-benefit watershed planning for sustainability



Sun Valley Park Drain and Infiltration System Project

Recommendation 4:

Develop a Stormwater Policy

- Recognize the unique nature of stormwater
- Enhance data collection
- Promote sustainable solutions and green infrastructure over traditional treatment controls
- Evaluate design storm conditions
- Consider alternative approaches – e.g., Sector-specific metal recyclers permit

Recommendation 5:

Develop guidance on beneficial use designations

Clarify the thresholds and evidence needed to designate *existing* and *probable future* beneficial uses

Recommendation 6:

Develop standard economic analysis procedures

- To facilitate balancing environmental, beneficial use, and economic considerations
- Formal cost-benefit analysis is *not* required
- Benefit should be commensurate with cost – i.e., ensure that water quality regulations are efficient
- Use to help establish priorities
- Could be developed specific to water resources by the SWRCB or more generally by CalEPA

Recommendation 7:

Improve and expand use of scientific data, research, and planning

- Fine-tune monitoring requirements to ensure collection and use of relevant data
- Expand upon existing efforts to compile data and make information publicly available (SWAMP, GAMA, regional efforts)

Recommendation 8:

Increase the Use of Science and Engineering in Decision Making

Implement recommendations of 2005 State Board report:

- "Blue ribbon" science panels to provide advice and guidance on complex scientific issues
- Science advisory panel available to the Regional Boards for technical review of field studies/data interpretation
- In-house experts available on an as-needed basis
- A mechanism for contracting with outside experts when needed for highly technical issues

Vance, W.A., *The Role of Science and Engineering in Decision Making within the State and Regional Water Boards* (September 2005)

Desired Outcomes

- Identify, plan for, and implement programs and projects to achieve State's environmental goals
- Get the most done with limited resources
- Utilize principles of sustainability and "green" solutions

Phase II Project site before construction

Phase I Project—Completed 2007

Tujunga Wash Ecosystem Restoration

Desired Outcomes

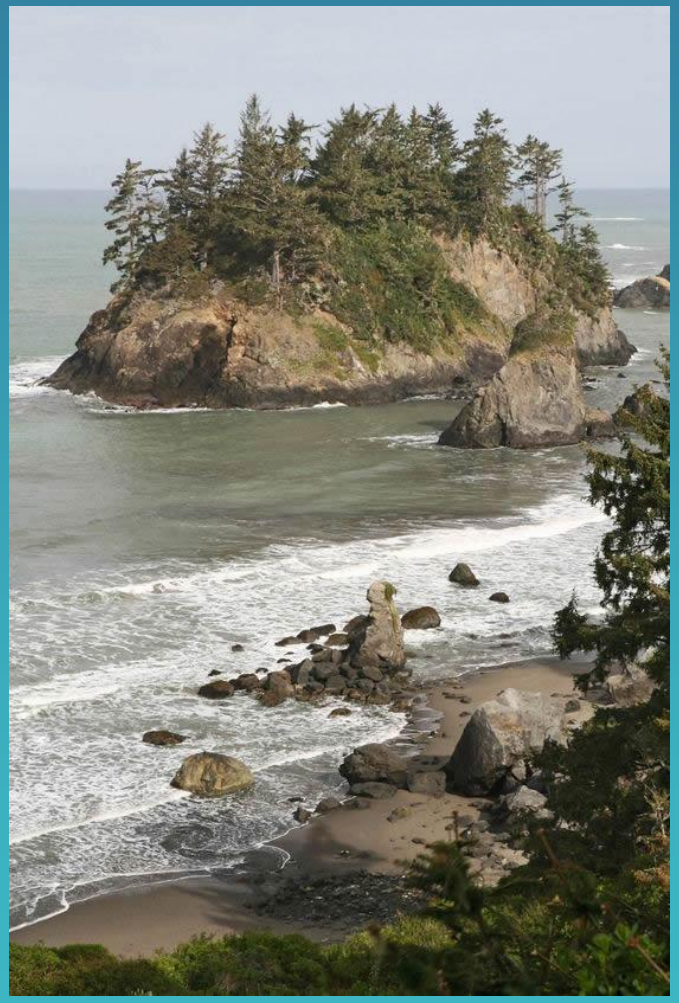
"The highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible."

Porter-Cologne Act, Section 13000

Summary of Actions

- **Develop new policies**
  - Stakeholder participation and funding
  - Maximum benefit
  - Stormwater
- **Provide Guidance**
  - Promote sustainable solutions
  - Designation of beneficial uses
- **Enhance current procedures**
  - Standard economic analysis
  - Use of data, research, and planning
  - Incorporation of best science and engineering

Thank You



Courtesy of the SWRCB

For more information:

Gerald D. Secundy
jerrys@cceeb.org

Susan C. Paulsen
spaulsen@flowscience.com

Robert W. Lucas
bob.lucas@calobby.com

SUPPLEMENTAL INFORMATION

EPA Integrated Planning Approach Framework (2012)

1. **Define the Scope**
2. **Plan Elements**
    1. Describe current water quality and regulations
    2. Describe existing wastewater and stormwater systems
    3. Incorporate stakeholder input via open process
    4. Identify, evaluate, and select alternatives; develop implementation schedules
    5. Conduct monitoring to evaluate performance
    6. Improve the plan over time
3. **Implementation**
    1. NPDES permits and compliance schedules
    2. Utilize creative enforcement options (administrative orders, negotiated consent decrees, state actions)

CCEEB Proposed Framework

Step 1: Identify the scope of the analysis and solicit data from the public

- Define the goals and limits of the analysis
- Determine likely sources of contaminants
- List the stakeholders affected by the analysis
- Identify funding
- Determine the level of stakeholder participation, and establish stakeholder agreements/ participation rules
- Solicit data and information from the public

CCEEB Proposed Framework

Step 2: Assess water quality standards using CWC Section 13241

- Past, present, and probable future beneficial uses
- Environmental characteristics of the hydrographic unit under consideration
- Water quality conditions that could reasonably be achieved through coordinated control of all factors affecting water quality in the area
- Economic considerations
- The need for developing housing in the region
- The need to develop and use recycled water

CCEEB Proposed Framework

Step 3: Applying Maximum Benefit Concepts

- California's anti-degradation policy states that, in water bodies where the water quality is better than established in policies, "such existing high quality water will be maintained until it has been demonstrated to the State that *any change* ***will be consistent with the maximum benefit to the people of the State***" [emphasis added].

CCEEB Proposed Framework

Step 4: Establish priorities and develop a program of implementation

- CWC Section 13242(a): describe the actions necessary to achieve the stated objectives
- Develop a time schedule for actions to be taken
- Describe surveillance required to determine compliance with objectives
- Establish a program of implementation consistent with priorities, and prepare for the future
- Continue to improve the plan and the implementation program, based on ongoing monitoring